

# THE MOTOR BOAT

## MCKENZIE'S CHAIN CLAMP

A CHAIN CLAMP is not only a necessity to the professional boatbuilder, but will prove invaluable to the amateur as well. Its advantages over the usual make-shift arrangements are very apparent, as it can be carried around the bilge of a boat from keel to gun-



Fig. 1—Chain Clamp in Use

wale, and the upper plank can be set up by it as well as if drawing in a straight line.

The bungling wooden set, and mysterious combination of levers and gump wedges, so much used, are always in the way of boring and nailing the planks, requiring the use of a ratchet bit stock; while the chain clamp gives plain sailing. There are no projections to interfere with anything, and it will be seen that the length of this clamp is limited only by the length of the chain.



Fig. 2—Keel Hook

Figure 1 represents a cross-section of a boat, showing the chain clamp in use both on an upper section and a lower section of planking.

Figure 2 is an enlarged view of the "keel hook," shown in use on the lower section of planking, Figure 1.

Figure 3 is the "plank hook," with long bearing so it will not injure the edge of the plank. It is shown in use on the upper section, Figure 1. It may sometimes be more convenient to reverse it and place the plank hook on the gunwale and the screw against the edge of plank.

Figure 4 is a "devil's pull," for the purpose of pulling the after end of a plank hard up against the stern board of a square stern boat. The two parts are pivoted together, so that the part having the teeth will tip either way and accommodate itself to the twisting of the plank. The plank should not project beyond the stern board more than two or three inches.



Fig. 3—Plank Hook

Figure 5 is a planking clip to protect the edge of planks where the foot of the screw

rests, and is used in place of the common chip of wood. It cannot slip from the plank, and it has a socket in which the foot of the screw rests, where it cannot slip nor turn.



Fig. 4—Devil's Pull

The screw is shown in use both in upper and lower section, Figure 1. The part that rests against the planking is widened at the end to prevent its twisting out of place while turning the screw; and it also has a slot there, in which to drop a link of the chain.

These clamps are made in two sizes, the larger for planks  $\frac{7}{8}$  inch and upwards, and the smaller size for  $\frac{7}{8}$  inch and under. A set includes a screw, a chain, a plank hook and a keel hook. The large size keel hooks are made in two lengths. One will take a 4-inch keel, and the other a 6-inch keel. The standard length of chains is  $3\frac{1}{2}$  feet for the small size and 4 feet for larger size, but longer chains may be had if desired. The A. S. Morss Co., Boston, Mass., issue a circular with prices of these clamps and full directions for their use, which they will send upon application.



Fig. 5—Planking Clip